Curriculum Vitae -   Nelson Leung-sang TANG

Academic qualification
2002   Doctor of Medicine (CUHK)
1997   Fellow of the Royal College of Pathologists of Australasia
1997   Fellow of the Hong Kong Society of Clinical Chemistry
1998   Accredited Clinical Biochemists
1991   Bachelor of Medicine and Bachelor of Surgery, MB ChB (CUHK)

Current Appointment
Professor, Department of Chemical Pathology, The Chinese University of Hong Kong
Leading Investigator, ***Laboratory for Genetics of disease susceptibility***, Li Ka Shing Institute of Health Sciences (LiHS)
Leading Investigator, Functional Genomics and Biostatistical Computing laboratory, CUHK Shenzhen Research Institute, Shenzhen

Supervisor and Examiner of graduate students
Supervised 17 research students at Master and Doctorial levels
Examiners of Graduate students from
    University of Hong Kong ,University of Science and Technology of Hong Kong and Sydney University

Scholarship and Awards
2003/04 Sir Robert Black Trust Fund Scholarship for a sabbatical to Strangeways Research Laboratory, University of Cambridge

Grant Reviewer and Review Board
Grant Review Board
2013- now   Member of Grant Review Board of HMRF (Health and Medical Research Fund), Hong Kong
Reviewer of grant proposals for
University Grants Committee - Research Grants Council, *Hong Kong*
National Medical Research Council, *Singapore*
Breast Cancer Campaign Research Grant, *United Kingdom*
The Medical Research Council (MRC), *South Africa*
The National Science Centre (Narodowe Centrum Nauki - NCN) in *Poland*
National Health Research Institute (NHRI), *Taiwan*
National Science Foundation (NSF), *China*

Service to Professorional bodies
-Overseas Examiner, Royal College of Pathologists of Australasia (RCPA).
-Advisory Committee of Genetics Pathology, RCPA.
 -Co-Director of Croucher Foundation Advance Study Institute on Genetic Statistics.

Previous relevant research work
I work in clinical genetics and complex traits for more than 25 years. In the past ten years, I research into complex traits like susceptibility to scoliosis and molecular mechanism of health aging and Alzheimer disease. I also developed algorithms in analysis of gene-gene interaction, e.g. "*BOOST: A fast approach to detecting gene-gene interactions in genome-wide case-control studies*". Google scholar citation ranked among top 10 in the field of complex trait (during 2019, 2020, 2021).
Refer to this weblink:
 https://scholar.google.com/citations?view_op=search_authors&hl=en&mauthors=label:complex_traits

Publications:

Over 300 publications, Total Citations > 20,000, h-index (google) > 65.
https://publons.com/researcher/2047982/nelson-l-tang/

Book editor of the volume "Chemical Diagnostics: from bench to bedside" in Topics in *Current Chemistry*, Publisher: Springer. ISBN 978-3-642-39941-1.

Five most representative publications in recent five years

Ma SL, Wu J, Zhu L, Chan R, Wang X, Huang D, **Tang NL (correspondence author),** Woo J. Peripheral Blood T Cell Gene Expression Responses to Exercise and HMB in Sarcopenia. *Nutrients.* 2021;13(7):2313.

Huang D, Liu AYN, Leung KS, **Tang NLS.** Direct Measurement of B Lymphocyte Gene Expression Biomarkers in Peripheral Blood Transcriptomics Enables Early Prediction of Vaccine Seroconversion. *Genes* (Basel). 2021;12(7):971.

Ji L, Wu D, Xie H, Yao B, Chen Y, Irwin DM, Huang D, Xu J, **Tang NL**, Zhang Y (**equal correspondence author,** 2020). Ambient Temperature is A Strong Selective Factor Influencing Human Development and Immunity. *Genomics Proteomics Bioinformatics.* 2020;18(5):489-500.

Lee KY, Leung KS, Ma SL, So HC, Huang D, **Tang NL(correspondence author),** Wong MH. Genome-Wide Search for SNP Interactions in GWAS Data: Algorithm, Feasibility, Replication Using Schizophrenia Datasets. *Front Genet.* 2020;11:1003.

Yip DK, Chan LL, Pang IK, Jiang W, **Tang NLS**, Yu W, Yip KY (2018). A network approach to exploring the functional basis of gene-gene epistatic interactions in disease susceptibility. *Bioinformatics* 34(10):1741-1749

Five representative publications beyond the recent five-year period

Zhu Z, Tang NL (equal 1st author), Xu L, ….., Lam TP, Qiu Y, Cheng JC (2015). Genome-wide association study identifies new susceptibility loci for adolescent idiopathic scoliosis in Chinese girls. *Nature Commun*; 6:8355. (equal first author)

Wan X, Yang C, Yang Q, Xue H, Tang NLS, Yu W. Detecting two-locus associations allowing for interactions in genome-wide association studies. Bioinformatics. 2010 Oct 15;26(20):2517–25.

Wan X, Yang C, Yang Q, Xue H, Fan X, Tang NLS, Yu W. BOOST: A fast approach to detecting gene-gene interactions in genome-wide case-control studies. Am J Hum Genet. 2010 Sep 10;87(3):325–40.

Jiang J, Tang NL, Ohlsson C, Eriksson AL, Vandenput L, Liao C, Wang X, Chan FW, Kwok A, Orwoll E, Kwok TC, Woo J, Leung PC (2010). Association of SRD5A2 variants and serum androstane-3alpha,17beta-diol glucuronide concentration in Chinese elderly men. Clin Chem.;56(11):1742-9.

Tang NL, Liao CD, Ching JK, Suen EW, Chan IH, Orwoll E, Ho SC, Chan FW, Kwok AW, Kwok T, Woo J, Leung PC (2010). Sex-specific effect of Pirin gene on bone mineral density in a cohort of 4000 Chinese. Bone 46(2):543-50.

Patent held and in progress

Determination of gene expression levels of a cell type US 9589099 B2.
Method to quantify telomere length and genomic motifs, US20210010069A1.
Peripheral blood sample analysis method and kit WO2022089426A1.